AUDIT REPORT FOR URUGUAY

JANUARY 15 THROUGH JANUARY 31, 2002

INTRODUCTION

Background

This report reflects information that was obtained during an audit of Uruguay's meat inspection system from January 15 through January 31, 2002. Eight of the 21 establishments certified to export meat to the United States were audited. Five of these were slaughter establishments; the other three were conducting processing operations.

The last audit of the Uruguay meat inspection system was conducted in June 2000. The auditor found significant problems in two establishments (12 and 14) that were then designated as marginal/re-review at the next audit. The areas of most concern in the 2000 audit were HACCP implementation problems such as calibration of instruments, critical limits not well defined, monitoring deficiency, improper CCP, and preventative action not being recorded. These deficiencies were all corrected at the time of this present review.

At this time, only cooked and canned beef, pork and mutton are permitted entry into the U.S.

During calendar year 2001, Uruguay establishments exported nearly 33 million pounds of beef and slightly less than one million pounds of mutton and lamb to the U.S. Port-of-entry rejections were for contamination (71,124 pounds), APHIS and Veterinary Service requirements not met (56,266 pounds), unsound product (3640 pounds) and transportation damage and missing shipping marks (58,142 pounds).

PROTOCOL

This on-site audit was conducted in four parts. One part involved visits with Uruguay national meat inspection officials to discuss oversight programs and practices, including enforcement activities. The second entailed an audit of a selection of records in the meat inspection headquarters facilities preceding and during the on-site visits. The third was conducted by on-site visits to establishments. On-site visits were determined by random selection and the addition of any establishments designated as re-review during the previous audit. Establishments for records-only audits were selected randomly. The fourth was a visit to two laboratories, one performing analytical testing of field samples for the national residue testing program, and the other culturing field samples for the presence of microbiological contamination with *Escherichia coli*.

Uruguay's program effectiveness was assessed by evaluating five areas of risk: (1) sanitation controls, including the implementation and operation of Sanitation Standard Operating Procedures (SSOPs), (2) animal disease controls, (3) residue controls, (4) slaughter/processing controls, including the implementation and operation of Hazard Analysis and Critical Control Point (HACCP) systems and the *E. coli* testing program, and (5) enforcement controls, including the testing program for *Salmonella* species.

During all on-site establishment visits, the auditor evaluated the nature, extent, and degree to which findings impacted on food safety and public health, as well as overall program delivery. The auditor also determined if establishment and inspection system controls were in place. Establishments that do not have effective controls in place to prevent, detect and eliminate product contamination/adulteration are considered unacceptable and therefore ineligible to export products to the U.S., and are delisted accordingly by the country's meat inspection officials

RESULTS AND DISCUSSION

Summary

Eight establishments were audited. The auditor found serious problems, such as insanitary dressing procedures, insanitary equipment, potential for cross contamination and failure to document fecal zero tolerance failures, in one establishment (Est. 199). This establishment was designated as marginal/re-review during the next audit. Details of audit findings, including compliance with HACCP, SSOPs, and testing programs for *Salmonella* and generic *E. coli*, are discussed later in this report.

HACCP-implementation deficiencies had not been found during the last audit. During this new audit, implementation of the required HACCP programs was found to be deficient in five of the eight establishments visited (Ests. 8, 12, 14, 135, and 199) and in one establishment of the records only audit (Est. 87). Details are provided in the <u>Slaughter/Processing Controls</u> section later in this report.

Entrance Meeting

On January 20, 2002 an entrance meeting was held in the Montevideo offices of the Ministerio de Ganaderia, Agricultura and Pesca (MGAP), and was attended by Dr. Hector Lazaneo, Director Division Industria Animal (DIA); Dr. Ronald Deutsch, Chief of Slaughter Division; Dr. Jorge Mattos, Sub-chief of Slaughter Division; Mr. Ramon Cardinal, Engineering Division; Mr. Gustavo Rossi, Shipping Division; Dr. Sergio Sallva, Chief of Department of Commercial and International Control; Dr. Daniel Elhordy, Chief of Cold Storage Establishments; Dr. Mario Serna, Chief of Department of Industrial Establishments; Dr. Victor Lyford Pike, Director of Government Laboratory (Dilave); Ms. Dora Gonzalez, Assessor of DIA; and Dr. M. Douglas Parks, International Auditor Staff Officer, USDA.

Topics of discussion included the following:

- 1. Up-to-date country profile.
- 2. Questions for the laboratories.
- 3. Enforcement activities for the past year.
- 4. Audit forms and questions.
- 5. Letter for additional information concerning the residue testing program from Policy in Washington.
- 6. Audit itinerary.

Headquarters Audit

There had been no changes in the organizational structure or upper levels of inspection staffing since the last U.S. audit of Uruguay's inspection system in June 2000.

To gain an accurate overview of the effectiveness of inspection controls, FSIS requested that the audits of the individual establishments be led by the inspection officials who normally conduct the periodic reviews for compliance with U.S. specifications. The FSIS auditor (hereinafter called "the auditor") observed and evaluated the process.

The auditor conducted a review of inspection system documents pertaining to the establishments listed for records review. This records review was conducted at the headquarters or the inspection service or at a district or regional office. The records review focused primarily on food safety hazards and included the following:

- Internal review reports.
- Supervisory visits to establishments that were certified to export to the U.S.
- Training records for inspectors and laboratory personnel.
- Label approval records such as generic labels, and animal raising claims.
- New laws and implementation documents such as regulations, notices, directives and guidelines.
- Sampling and laboratory analyses for residues.
- Pathogen reduction and other food safety initiatives such as SSOPs, HACCP programs, generic *E. coli* testing and *Salmonella* testing.
- Sanitation, slaughter and processing inspection procedures and standards.
- Control of products from livestock with conditions such as tuberculosis, cysticercosis, etc., and of inedible and condemned materials.
- Export product inspection and control including export certificates.
- Enforcement records, including examples of criminal prosecution, consumer complaints, recalls, seizure and control of noncompliant product, and withholding, suspending, withdrawing inspection services from or delisting an establishment that is certified to export product to the United States.

No concerns arose as a result the examination of these documents.

Government Oversight

All inspection veterinarians and inspectors in establishments certified by Uruguay as eligible to export meat products to the United States were full-time MGAP employees, receiving no remuneration from either industry or establishment personnel.

Establishment Audits

Twenty-one establishments were certified to export meat products to the United States at the time this audit was conducted. Eight establishments were visited for on-site audits. In all of the eight establishments visited, both MGAP inspection system controls and establishment system controls were in place to prevent, detect and control contamination and adulteration of products.

Laboratory Audits

During the laboratory audits, emphasis was placed on the application of procedures and standards that were equivalent to U.S. requirements. Information was also collected about the risk areas of government oversight of accredited, approved, and private laboratories, intra-laboratory quality assurance procedures, including sample handling; and methodology.

The Government Veterinary Division Laboratory (Dilave) in Montevideo was audited on January 25, 2002. Except as noted below, effective controls were in place for sample handling and frequency, timely analysis, data reporting, tissue matrices for analysis, equipment operation and printouts, minimum detection levels, recovery frequency, percent recoveries, and corrective actions. The methods used for the analyses were acceptable. No compositing of samples was done (this was not a deficiency). The check sample program did meet FSIS requirements.

• In most sections of the laboratory, the stock and/or standard solutions were not marked with an expiration date.

Uruguay's microbiological testing for *Salmonella* was being performed in government laboratories. The microbiological testing for *E. coli* is done in company and private laboratories. One of these private laboratories doing *E. coli* testing, Laboratorio Industrial Montevideo in Montevideo, was audited.

Establishment Operations by Establishment Number

The following operations were being conducted in the eight establishments:

Beef, mutton and lamb slaughter and boning - two establishments (7 and 14) Beef slaughter and boning - three establishments (8, 12 and 199)

Beef processing only – one establishment (135) Cold storage only – two establishments (10 and 175)

SANITATION CONTROLS

Based on the on-site audits of establishments, Uruguay's inspection system had controls in place for water potability and chlorination, back siphonage prevention, hand washing facilities, sanitizers, establishment separation, pest control, temperature control, lighting, operations and inspection work space, ventilation, facilities and equipment approval.

Sanitation Standard Operating Procedures (SSOPs)

Each establishment was evaluated to determine if the basic FSIS regulatory requirements for SSOPs were met, according to the criteria employed in the U.S. domestic inspection program. The data collection instrument used accompanies this report (Attachment A).

The SSOPs were found to meet the basic FSIS regulatory requirements, with one exception, the plan was not signed and dated in Establishment 7. This was corrected immediately.

Cross-Contamination

There were some instances where the possible cross contamination of product was observed.

- 1. A particle of rail grease was found inside a vacuum package of product (Est. 7)
- 2. In the cooked product kitchen a tube of cooked beef was touching the floor (Est. 8)
- 3. The procedure for temperature taking of frozen product was not aseptic (Est.10).
- 4. Grease particles were seen on carcasses in the slaughter department, in the carcass coolers and at the boning room pre-trim station (Est.14) and additionally on meat on the boning table (Est. 199).
- 5. Heavily beaded condensate was observed above exposed product in two establishments (Ests. 8 and 135).
- 6. The carcass and/or the horn saw was not adequately cleaned and sanitized between uses in two establishments (Ests. 12 and 199).
- 7. The moving viscera table was not cleaned and sanitized between uses in two establishments (Ests. 8 and 199).

Commitments from inspection and establishment personnel to correct these deficiencies and other minor deficiencies were made on the spot.

Product Handling and Storage

Meat and meat products were found to be stored under sanitary conditions in all establishments that were visited.

Personnel Hygiene and Practices

Personnel hygiene practices were acceptable in all establishments visited.

ANIMAL DISEASE CONTROLS

Uruguay's inspection system had controls in place to ensure adequate animal identification, ante-mortem and post-mortem inspection procedures and dispositions, condemned and restricted product control, and procedures for sanitary handling of returned and rework product.

There was an outbreak Foot and Mouth Disease (FMD) in Uruguay in 2001 resulting in suspension of operation by the Uruguay Government Officials in all US approved establishments. Consequently, FSIS did conduct an audit of their system in FY 2000.

RESIDUE CONTROLS

Uruguay's National Residue Testing Plan for 2002 was being followed, and was on schedule. The Uruguay inspection system had adequate controls in place to ensure compliance with sampling and reporting procedures and storage and use of chemicals.

SLAUGHTER/PROCESSING CONTROLS

The Uruguay inspection system had controls in place to ensure adequate ante-and post-mortem inspection procedures and dispositions, control and disposition of dead, dying, diseased or disabled animals, humane handling and slaughter. There was one deficiency noted during the audit:

• The bung drop procedure in two establishments resulted in contaminated tissues (Ests. 12 and 199). These procedures were immediately corrected by establishment supervisors.

HACCP Implementation

All establishments approved to export meat products to the U.S. are required to have developed and implemented a Hazard Analysis – Critical Control Point (HACCP) system. Each of these systems was evaluated according to the criteria employed in the U.S. domestic inspection program. The data collection instrument used accompanies this report (Attachment B).

The HACCP programs were found to meet the basic FSIS regulatory requirements with the following implementation problems:

- 1. There was no pre-shipment review in Establishment 8.
- 2. The slaughter CCPs were not included in the pre-shipment review in Establishment 12.
- 3. During carcass examination (a CCP), the neck area was not being examined by the monitoring personnel in Establishment 14.
- 4. The cooking temperature (a CCP) was measured in the cooking chamber and not in the product and no correlation figures were available in Establishment 135.
- 5. At the zero tolerance CCP, the monitoring operator was not recording feces without being prompted in Establishment 199.
- 6. During a records only audit, it was revealed that a cold storage establishment was reboxing product in damaged boxes without a HACCP plan in effect in Establishment 87.

Immediate action by establishment and inspection personnel was taken to correct these deficiencies.

Testing for Generic E. coli

Uruguay has adopted the FSIS regulatory requirements for E. coli testing.

Five of the establishments audited were required to meet the basic FSIS regulatory requirements for generic *E. coli* testing, and were audited and evaluated according to the criteria employed in the U.S. domestic inspection program. The data collection instrument used accompanies this report (Attachment C).

The *E. coli* testing programs were found to meet the basic FSIS regulatory requirements.

Additionally, establishments had adequate controls in place to prevent meat products intended for Uruguay domestic consumption from being commingled with products eligible for export to the U.S.

ENFORCEMENT CONTROLS

Inspection System Controls

The MGAP inspection system controls [control of restricted product and inspection samples, boneless meat re-inspection, shipment security, including shipment between establishments, prevention of commingling of product intended for export to the United States with domestic

product, monitoring and verification of establishment programs and controls (including the taking and documentation of corrective actions under HACCP plans), inspection supervision and documentation, the importation of only eligible livestock or poultry from other countries (i.e., only from eligible countries and certified establishments within those countries), and the importation of only eligible meat or poultry products from other counties for further processing] were in place and effective in ensuring that products produced by the establishment were wholesome, unadulterated, and properly labeled. In addition, adequate controls were found to be in place for security items, shipment security, and products entering the establishments from outside sources.

Testing for Salmonella Species

Five of the establishments audited were required to meet the basic FSIS regulatory requirements for *Salmonella* testing, and were evaluated according to the criteria employed in the U.S. domestic inspection program. The data collection instrument used accompanies this report (Attachment D).

Uruguay has adopted the FSIS regulatory requirements for Salmonella testing.

The *Salmonella* testing programs were found to meet the basic FSIS regulatory requirements with one exception.

1. Sampling for *Salmonella* was not done on raw product but on canned product after cooking in Establishment 8. This deficiency was corrected by establishment and inspection personnel immediately.

Species Verification-Testing

At the time of this audit, Uruguay was not exempt from the species verification-testing requirement. The auditor verified that species verification testing was being conducted in accordance with FSIS requirements.

Monthly Reviews

These reviews were being performed by supervisors. All were veterinarians with many years of experience. Dr. Ron Deutsch was in charge of the slaughter establishments, Dr. Mario Serna of the processing establishments, and Dr. Daniel Elhordoy of storage facilities.

The internal review program was applied equally to both export and non-export establishments. Internal review visits were not announced in advance, and were conducted, at times by individuals and at other times by a team of reviewers, at least once monthly, and sometimes several times within a month. The records of audited establishments were kept in the inspection offices of the individual establishments, and copies were also kept in the

central MGAP offices in Montevideo, and were routinely maintained on file for a minimum of three years.

In the event that an establishment is found, during one of these internal reviews, to be out of compliance with U.S. requirements, and is delisted for U.S. export, before it may again qualify for eligibility to be reinstated, a commission is empowered to conduct an in-depth review, and the results are reported to Drs. Hector Lazaneo and Ron Deutsch for evaluation; they formulate a plan for corrective actions and preventive measures.

Enforcement Activities

The following cases were investigated, enforced and promulgated during the calendar year 2001.

- 1. Listeria was isolated in cooked hamburgers. The affected product was destroyed and an investigation with corrective action was done in the establishment involved.
- 2. Incorrectly labeled tongues were found in Belgium. Investigation revealed that the case was a fraud probably originating in Brazil. Action on the product was left to authorities in Belgium.
- 3. Shipment of hams with an expired date. The Ministry ordered microbiological tests of the product and it proved to be unfit for human consumption and ordered its destruction.

Exit Meetings

An exit meeting was conducted in Montevideo on January 31, 2002. The participants included: Mr. Recaredo Ugarte, Director General MGAP; Dr. Hector Lazaneo, Director of DIA; Mr. Hipelito Tapie, Director of Sanitation Division; Mr. Julio Barozzi, Assessor MGAP; Mr. Ricardo Mendez, Chief of Laboratory Supplies; Dr. Carlos Correa, Delegate to OIE; Ms Marta Cuadrad, Deputy Director of Laboratory; Mr. Donald Wimmer, APHIS Area Director; Ms Elizabeth Power, US Embassy Political Officer Montevideo and Dr. M. Douglas Parks, USDA International Audit Staff Officer.

The following topics were discussed:

- 1. Audit findings to include sanitation problems and HACCP implementation deviations. The response from MGAP Officials was that all deficiencies were corrected immediately. Information about these problems will be applied to all U.S. Certified establishments immediately.
- 2. Request for 30-day correction letters to be sent to establishments with HACCP implementation problems. These letters were to be sent as soon as possible.
- 3. Ratings of establishments for this audit and in the future.

- 4. Receipt of documents requested at the entrance conference to include country profile, enforcement activities and laboratory questions.
- 5. The delisting of Establishment 701 was requested due to unavailability of operations at the time of the audit. Dr. Hector Lazaneo, Director of DIA said that this would be done on this date.

CONCLUSION

The inspection system of Uruguay was found to have effective controls to ensure that product destined for export to the United States was produced under conditions equivalent to those which FSIS requires in domestic establishments. A major concern is that HACCP implementation is a problem at the present. Deficiencies noted in this area were corrected and the information will be applied to other U.S. certified establishments.

Dr. M. Douglas Parks International Audit Staff Officer (signed) Dr. M. Douglas Parks

ATTACHMENTS

- A. Data collection instrument for SSOPs
- B. Data collection instrument for HACCP programs
- C. Data collection instrument for E. coli testing
- D. Data collection instrument for Salmonella testing
- E. Laboratory Audit Forms
- F. Individual Foreign Establishment Audit Forms
- G. Written Foreign Country's Response to the Draft Final Audit Report

Data Collection Instrument for SSOPs

Each establishment was evaluated to determine if the basic FSIS regulatory requirements for SSOPs were met, according to the criteria employed in the U.S. domestic inspection program. The data collection instrument contained the following statements:

- 1. The establishment has a written SSOP program.
- 2. The procedure addresses pre-operational sanitation.
- 3. The procedure addresses operational sanitation.
- 4. The pre-operational procedures address (at a minimum) the cleaning of food-contact surfaces of facilities, equipment, and utensils.
- 5. The procedure indicates the frequency of the tasks.
- 6. The procedure identifies the individuals responsible for implementing and maintaining the activities.
- 7. The records of these procedures and any corrective action taken are being maintained on a daily basis.
- 8. The procedure is dated and signed by the person with overall on-site authority.

The results of these evaluations were as follows:

| 7 | √ | $\sqrt{}$ | √ | V | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | no |
|-----|-----------|--------------|-----------|-----------|-----------|-----------|--------------|-----------|
| 8 | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ |
| 10 | $\sqrt{}$ | \checkmark | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | \checkmark | $\sqrt{}$ |
| 12 | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | V | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ |
| 14 | √ | $\sqrt{}$ | $\sqrt{}$ | V | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ |
| 135 | | $\sqrt{}$ | | V | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ |
| 175 | | $\sqrt{}$ | | V | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ |
| 199 | | $\sqrt{}$ | | V | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ |

| Est.# | 1.Written program addressed | 2. Pre-op sanitation addressed | 3. Oper. sanitation addressed | 4. Contact surfaces addressed | 5. Frequency addressed | 6. Responsible indiv. identified | 7. Documentation done daily | 8. Dated and signed |
|-------|-----------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|------------------------|----------------------------------|-----------------------------|---------------------|
| 2 | V | 1 | V | V | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | V |
| 52 | V | 1 | √ | V | V | V | V | √ |
| 55 | V | V | $\sqrt{}$ | $\sqrt{}$ | \checkmark | \checkmark | $\sqrt{}$ | $\sqrt{}$ |
| 87 | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | |
| 158 | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | |
| 344 | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | \checkmark | \checkmark | \checkmark | \checkmark | $\sqrt{}$ |
| 379 | V | V | V | V | V | V | V | V |
| 701 | V | V | V | V | V | V | V | V |

Data Collection Instrument for HACCP Programs

Each of the establishments approved to export meat products to the U.S. was required to have developed and implemented a Hazard Analysis – Critical Control Point (HACCP) system. Each of these systems was evaluated according to the criteria employed in the U.S. domestic inspection program. The data collection instrument included the following statements:

- 1. The establishment has a flow chart that describes the process steps and product flow.
- 2. The establishment has conducted a hazard analysis that includes food safety hazards likely to occur.
- 3. The analysis includes the intended use of or the consumers of the finished product(s).
- 4. There is a written HACCP plan for each product where the hazard analysis revealed one or more food safety hazard(s) reasonably likely to occur.
- 5. All hazards identified in the analysis are included in the HACCP plan; the plan lists a CCP for each food safety hazard identified.
- 6. The HACCP plan specifies critical limits, monitoring procedures, and the monitoring frequency performed for each CCP.
- 7. The plan describes corrective actions taken when a critical limit is exceeded.
- 8. The HACCP plan was validated using multiple monitoring results.
- 9. The HACCP plan lists the establishment's procedures to verify that the plan is being effectively implemented and functioning and the frequency for these procedures.
- 10. The HACCP plan's record-keeping system documents the monitoring of CCPs and/or includes records with actual values and observations.
- 11. The HACCP plan is dated and signed by a responsible establishment official.
- 12. The establishment is performing routine pre-shipment document reviews.

The results of these evaluations were as follows:

| | 1. | 2. | 3. Use | 4. Plan | 5. | 6. | 7. | 8. Plan | 9. | 10.Ad | 11. | 12.Pre |
|--------|--------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|--------|--------|-----------|
| | Flow | Haz- | & | for | CCPs | Mon- | Corr. | valida- | Ade- | e- | Dat-ed | - |
| | diagra | ard an- | users | each | for all | itoring | actions | ted | quate | quate | and | shipmt |
| Est. # | m | alysis | includ- | hazard | hazard | is | are | | verific. | docu- | signed | .doc. |
| | | conduc | ed | | S | spec- | des- | | proced | menta- | | review |
| | | t-ed | | | | ified | cribed | | -ures | tion | | |
| 7 | | | | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | | | $\sqrt{}$ |
| 8 | | | | | | | | | | | | no |
| 10 | cold | store | only | | | | | | | | | |
| 12 | | | | | | | | | | | | |
| 14 | | | | | | no | | | | | | |
| 135 | | | | | | no | | | $\sqrt{}$ | | | |
| 175 | cold | store | only | | | | | | | | | |
| 199 | | | | | | no | | | $\sqrt{}$ | | | |

| 2 | | | | V | | | | $\sqrt{}$ |
|-----|-----------|-------|------|---------------|-------|---|------------------|------------------|
| 52 | | | | | | | | |
| 55 | $\sqrt{}$ | | V | V | | | | |
| 87 | cold | store | only | | | | | |
| 158 | | | | $\sqrt{}$ | | | \checkmark | \checkmark |
| 344 | | | | | | | | |
| 379 | | V | V | V | V | V | | V |
| 701 | | V | V | V | V | V | | V |

Data Collection Instrument for Generic E. coli Testing

Each establishment was evaluated to determine if the basic FSIS regulatory requirements for generic *E. coli* testing were met, according to the criteria employed in the U.S. domestic inspection program. The data collection instrument contained the following statements:

- 1. The establishment has a written procedure for testing for generic *E. coli*.
- 2. The procedure designates the employee(s) responsible to collect the samples.
- 3. The procedure designates the establishment location for sample collecting.
- 4. The sample collection is done on the predominant species being slaughtered.
- 5. The sampling is done at the frequency specified in the procedure.
- 6. The proper carcass site(s) and/or collection methodology (sponge or excision) is/are being used for sampling.
- 7. The carcass selection is following the random method specified in the procedure or is being taken randomly.
- 8. The laboratory is analyzing the sample using an AOAC Official Method or an equivalent method.
- 9. The results of the tests are being recorded on a process control chart showing the most recent test results.
- 10. The test results are being maintained for at least 12 months.

| | 1.Writ- | 2. Samp- | 3.Samp- | 4. Pre- | 5. Samp- | 6. Pro- | 7. Samp- | 8. Using | 9. Chart | 10. Re- |
|--------|----------|----------|----------|---------|-----------|----------|----------|----------|----------|------------|
| | ten pro- | ler des- | ling lo- | domin. | ling at | per site | ling is | AOAC | or graph | sults are |
| Est. # | cedure | ignated | cation | species | the req'd | or | random | method | of | kept at |
| | | | given | sampled | freq. | method | | | results | least 1 yr |
| 7 | | | | | | | | | | $\sqrt{}$ |
| 8 | V | | | | | | | | | |
| 10 | cold | storage | only | | | | | | | |
| 12 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 135 | Proce | essing | only | | | | | | | |
| 175 | cold | storage | only | | | | | | | |
| 199 | | | | | | | | | | |

| 2 | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | | | | $\sqrt{}$ | $\sqrt{}$ |
|-----|--------------|-----------|-----------|-----------|-----------|--------------|---|---|-----------|-----------|
| 52 | | $\sqrt{}$ | | $\sqrt{}$ | | | | | $\sqrt{}$ | $\sqrt{}$ |
| 55 | \checkmark | | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | | | | | $\sqrt{}$ |
| 87 | cold | storage | only | | | | | | | |
| 158 | Proce | essing | only | | | | | | | |
| 344 | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | | | | $\sqrt{}$ | $\sqrt{}$ |
| 379 | V | V | V | V | V | V | V | V | V | V |
| 701 | | | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | \checkmark | | | | $\sqrt{}$ |

Data Collection Instrument for Salmonella testing

Each slaughter establishment was evaluated to determine if the basic FSIS regulatory requirements for *Salmonella* testing were met, according to the criteria employed in the U.S. domestic inspection program. The data collection instrument included the following statements:

- 1. Salmonella testing is being done in this establishment.
- 2. Carcasses are being sampled.
- 3. Ground product is being sampled.
- 4. The samples are being taken randomly.
- 5. The proper carcass site(s) and/or collection of proper product (carcass or ground) is being used for sampling.
- 6. Establishments in violation are not being allowed to continue operations.

The results of these evaluations were as follows:

| F . " | 1. Testing as | 2. Carcasses are | 3. Ground | 4. Samples are | 5. Proper site | 6. Violative |
|--------|---------------|------------------|------------|----------------|----------------|--------------|
| Est. # | required | sampled | product is | taken randomly | and/or proper | est's stop |
| | | | sampled | | prod. | operations |
| 7 | $\sqrt{}$ | | N/A | $\sqrt{}$ | | $\sqrt{}$ |
| 8 | $\sqrt{}$ | $\sqrt{}$ | no | $\sqrt{}$ | | $\sqrt{}$ |
| 10 | cold | storage | only | | | |
| 12 | | $\sqrt{}$ | N/A | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ |
| 14 | $\sqrt{}$ | $\sqrt{}$ | N/A | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ |
| 135 | processing | only | | | | |
| 175 | cold | storage | only | | | |
| 199 | $\sqrt{}$ | $\sqrt{}$ | N/A | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ |

| 2 | V | $\sqrt{}$ | | $\sqrt{}$ | V | V |
|-----|------------|-----------|-----------|-----------|-----------|---|
| 52 | V | $\sqrt{}$ | | $\sqrt{}$ | V | V |
| 57 | V | $\sqrt{}$ | | $\sqrt{}$ | V | V |
| 87 | cold | storage | only | | | |
| 158 | processing | only | | | | |
| 344 | V | $\sqrt{}$ | | $\sqrt{}$ | V | V |
| 379 | V | $\sqrt{}$ | | $\sqrt{}$ | V | V |
| 701 | V | $\sqrt{}$ | $\sqrt{}$ | V | $\sqrt{}$ | |